

1. A method comprising:

receiving at a first transceiver a beacon frame wherein said beacon frame comprises a beacon interval and wherein said first transceiver communicates in accordance with a first communications protocol using a shared-communications channel;

determining a transmit opportunity on said shared-communications channel wherein said transmit opportunity is based on the time at which said beacon frame is received and on said beacon interval; and

notifying a second transceiver of said transmit opportunity wherein said second transceiver communicates in accordance with a second communications protocol using said shared-communications channel.

2. The method of claim 1 further comprising powering down said first transceiver after said determining.

3. The method of claim 1 further comprising notifying said second transceiver that said transmit opportunity is at an end.

4. The method of claim 1 wherein said first transceiver remains on after said notifying.

5. The method of claim 1 further comprising muting a third transceiver after said determining wherein said third transceiver communicates in accordance with said first communications protocol using said shared-communications channel.

6. The method of claim 1 wherein said transmit opportunity is also based on at least one request to transmit being received from said second transceiver.

7. The method of claim 6 wherein receipt of said at least one request to transmit is periodic.

8. A method comprising:

receiving at a first transceiver a first beacon frame wherein said first transceiver communicates in accordance with a first communications protocol using a shared-communications channel;

determining a transmit opportunity on said shared-communications channel;

notifying a second transceiver of said transmit opportunity wherein said second transceiver communicates in accordance with a second communications protocol using said shared-communications channel; and

powering down said first transceiver wherein said powering down is dependent on the time remaining before receiving a second beacon frame.

9. The method of claim 8 wherein said first beacon frame comprises a beacon interval and wherein said transmit opportunity is based on the time at which said first beacon frame is received and on said beacon interval.

10. The method of claim 8 wherein said powering down is also dependent on the time it takes said transceiver to recover from leaving a power down state.

11. The method of claim 8 further comprising notifying said second transceiver that said transmit opportunity is at an end.

12. The method of claim 8 further comprising muting a third transceiver after said determining wherein said third transceiver communicates in accordance with said first communications protocol using said shared-communications channel.

13. The method of claim 8 wherein said transmit opportunity is also based on at least one request to transmit being received from said second transceiver.

14. The method of claim 13 wherein receipt of said at least one request to transmit is periodic.

15. An apparatus comprising:

a first air interface subsystem comprising:

- (1) a receiver for receiving a beacon frame in accordance with a first communications protocol using a shared-communications channel wherein said beacon frame comprises a beacon interval;
- (2) a processor for determining a transmit opportunity on said shared-communications channel wherein said transmit opportunity is based on the time at which said beacon frame is received and on said beacon interval; and
- (3) an interface for notifying a second air interface subsystem of said transmit opportunity; and

said second air interface subsystem comprising a first transmitter wherein said first transmitter communicates in accordance with a second communications protocol using said shared-communications channel;

wherein said first air interface subsystem and said second air interface subsystem are associated with the same host computer.

16. The apparatus of claim 15 further comprising a second transmitter wherein said second transmitter communicates in accordance with said first communications protocol using said shared-communications channel.

17. The apparatus of claim 16 wherein at least one of said receiver and said second transmitter powers down after said processor determines said transmit opportunity.

18. The apparatus of claim 16 wherein said receiver and said second transmitter remain on after said interface notifies said second air interface subsystem.

19. The apparatus of claim 15 wherein said transmit opportunity is also based on at least one request to transmit being received from said second air interface subsystem.

20. An apparatus comprising:

a station comprising:

(1) a first air interface subsystem for:

- (a) transmitting a first data block in accordance with a first communications protocol using a shared-communications channel;
- (b) receiving a beacon frame; and
- (c) determining a transmit opportunity on said shared-communications channel wherein said transmit opportunity is based on said beacon frame; and

(2) a second air interface subsystem for transmitting a second data block in accordance with a second communications protocol using said shared-communications channel; and

a host computer for:

- (1) providing said first data block to said first air interface subsystem; and
- (2) providing said second data block to said second air interface subsystem.

21. The apparatus of claim 20 wherein said beacon frame comprises a beacon interval and wherein said transmit opportunity is also based on the time at which said first beacon frame is received and on said beacon interval.